

### **Amendments to the Specification**

Please replace the Title with the following amended Title:

**Method of Using a Phosphodiesterase 5A (PDE5A) Crystal Structure and Uses for Development of Ligands**

Please replace paragraph [0083] with the following amended paragraph:

[0083] Table 1 provides atomic coordinates for human PDE5A phosphodiesterase domain, **residues 534-657 (SEQ ID NO:32), 672-789 (SEQ ID NO:33), and 804-862 (SEQ ID NO:34).**

In this table, the various columns have the following content, beginning with the left-most column:

ATOM: Refers to the relevant moiety for the table row.

Atom number: Refers to the arbitrary atom number designation within the coordinate table.

Atom Name: Identifier for the atom present at the particular coordinates.

Chain ID: Chain ID refers to one monomer of the protein in the crystal, e.g., chain "A", or to other compound present in the crystal, e.g., HOH for water, and L for a ligand or binding compound. Multiple copies of the protein monomers will have different chain Ids.

Residue Number: The amino acid residue number in the chain.

X, Y, Z: Respectively are the X, Y, and Z coordinate values.

Occupancy: Describes the fraction of time the atom is observed in the crystal. For example, occupancy = 1 means that the atom is present all the time; occupancy = 0.5 indicates that the atom is present in the location 50% of the time.

B-factor: A measure of the thermal motion of the atom.

Element: Identifier for the element.

Please replace paragraph [0323] with the following amended paragraph:

[0323] When using radiolabeled substrate  $K_i = \frac{IC_{50}}{1 + [L^*]/K_D}$ .

Please replace the Abstract with the following amended Abstract:

A crystal structure of **phosphodiesterase 5A** (PDE5A) is described that was determined by X-ray crystallography. The use of PDE5A crystals and structural information can, for example, be used for identifying molecular scaffolds and for developing ligands that bind to and modulate PDE5A.

Please replace the original Sequence Listing with the Sequence Listing provided herewith.